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UNITED STATES DEPARTMENT OF AGRICULTURE
Weather Bureau —— Bureau of Agricultural Economics

REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA
For the Week Ending Tuesday, August 31, 1937.

Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau.
Offices: Fourth Floor, Federal Office Building, Helena, Montana.

The forepart of the week was warm and sunny, with maximum temperatures of 100°, or higher, reported from eastern districts on the 26th and 27th. The latter part was much cooler, resulting in some light to heavy frosts in northern districts on the 29th. There was no precipitation of importance outside of a few north-central districts, where amounts varying from one-quarter to one-half inch fell.

Midsummer heat early in the week hastened ripening of late grains, but was detrimental to late growing unirrigated crops. Hot, drying winds removed considerable moisture from soils, and withered some corn and millet in central and northeastern districts. Strong winds shattered considerable grain in north-central districts, where some had been allowed to become overripe for facilitating harvest of uneven maturing fields. Frosts damaged gardens slightly and killed some potato vines. Late growing irrigated crops, especially sugar beets and beans, made good growth.

Weather conditions continued generally favorable for farm work. A little haying and harvesting of small grains will continue for a while, and some cutting of the third crop of alfalfa, now coming into bloom in the southeast, is expected to start soon. Threshing continues in full swing. Some of the more advanced districts in the southeast have finished threshing. A good start has been made with winter grain seeding in the more favorable moisture areas, but many are delaying until moisture conditions improve. Soils are reported too dry for germination in some western counties. Cutting of corn for fodder is under way in the east. Corn for grain crop needs several more good growing days. Seed peas, alfalfa, and clover seed have been threshed, with fair to good yields. Truck crops and gardens are generally in good shape.

Ranges and pastures continue drying up, although feed remains ample for the present except in the northeast and limited central districts. Showers benefitted ranges in north-central districts. Emergency feed crops have failed to develop in the extreme northeast because of recurring drouth. Much use of Russian thistles for feed continues to be made in the east. Although water holes have been drying up, no acute water shortage has developed. Good rains are needed generally to fill waterholes and bring on fall pasturage.

Livestock prices are the best in recent years. Most lambs and ewes have been contracted for, but there has been little selling so far among cattle holders. Shipment of lambs has started from several western districts. Movement of cattle continues from the drouth areas, many being moved to points south of the Yellowstone River, where winter feed prospects are generally good. Further loss of horses has been reported from eastern counties, although the disease appears to have abated somewhat since last week.

Grasshoppers are still damaging some ranges and pastures in central and eastern sections.

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TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING AUGUST 31, 1937

Station	Temperature Highest	Temperature Lowest	Sunshine % of Possible	Precipitation (inches and hundredths) Total This week.	Total since April 1, 1937	Total since Apr.1 To Sept. 1, 1936.
Billings	97	48	*	0.13	7.08	5.08
Bozeman	89	41	*	T	9.50	5.94
Cut Bank	91	31	*	0.01	6.52	8.78
Fort Peck	97	46	*	T	4.33	2.84
Glendive	103	48	*	0.07	6.58	5.74
Great Falls	93	38	*	0.24	5.73	4.63
Havre	94	38	80	0.42	7.60	4.05
HELENA	92	39	86	T	5.16	5.54
Kalispell	86	36	90	T	5.96	4.36
Lewistown	92	36	*	0.11	6.73	7.45
Malta	97	35	*	0.09	6.69	3.98
Miles City	100	52	72	T	6.69	2.89
Missoula	94	42	90	0.09	3.78	4.99
Poplar	99	42	*	0.00	5.31	5.15

*No data.

Series - 1937 - No. 21.
Helena, Montana,
September 1, 1937.

W. E. Maughan, Weather Bureau.
Jay G. Diamond, Bureau of Agricultural Economics.

The following county summaries of crop conditions for the week ending August 28, 1937, are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: No precipitation. Warm days; cool nights. Most of wild hay harvested. Grain being cut with some threshing started; fair yields. Second crop alfalfa very light. Very few lambs left for sale; most lambs good. Ranges dry, but good feed in most sections. A little activity started in cattle.

BLAINE: Clear, sunshiny weather. Harvesting of small grain crops well advanced. Excellent yields being reported on irrigated land. Dry land very poor. Sugar beet crop in excellent condition. Livestock in good condition. No shipments to market as yet. Range extremely dry, but sufficient grass to carry stock to end of grazing season.

CARBON: No precipitation. Cool mornings and dry days. Threshing still in progress. Last irrigation of beans completed in most all cases. Some bean cutting started in Bridger district, with fair yields in prospect. Wheat yields ranging from 12 to 15 bushels in dry land areas and in irrigated sections from 25 to 50 bushels. Oat yield a little light where there was more hot weather. Water in rivers very low. Livestock condition very good.

CASCADE: Hot dry winds reduced available moisture in summer fallow, and winter wheat is being seeded in dry ground. Cloudy skies and light showers Saturday morning promise some relief. Harvest of winter wheat on dry land well advanced. Yields generally are lower than expected. Harvesting of small grains and second cutting of alfalfa on irrigated farms is under way and fair to good yields reported. Ample feed for all livestock in county. Stock in good condition. Labor normal.

CHOUTEAU: Continued dry; temperature above normal. Spring wheat harvest continues in Big Sandy area. Wheat testing up to 60 pounds per bushel and of good quality. Harvest in other areas practically complete. Large stock holders will be shipping out cattle soon. Feed needed for breeding stock that will be held over.

CUSTER - POWDER RIVER: Temperatures varying with rather hot days and cool nights. No precipitation of consequence. Dry land harvest completed. Irrigated crops, including alfalfa and sugar beets, making good growth, but water is short in Tongue River ditch and being rotated. Rain needed to fill water holes. Some livestock being moved on account of short water. Feed generally good on south side and cattle in good shape. Several bands of sheep on move from north side ranges to south country. Very little stuff expected to remain north of Yellowstone for winter.

DANIELS: No precipitation. Temperatures running close to 100° during entire week. Some harvesting of Russian thistles for feed continues. Grasshoppers and other insects are beginning to disappear. Arrangements for moving out of livestock and shipping in of feed continues. 85 men being employed by WPA on the two river irrigation projects. 170 being employed by WPA on road construction.

DAWSON: Generally warm throughout week, with nights cool. Harvesting continues with small surplus above farm requirements. Corn will produce considerable feed. Thistles being stacked in large quantities. Livestock conditions in larger portions of county continue favorable.

FALLON - CARTER: Hot dry weather prevailed the past week. All grain harvested and many farmers cutting their corn. The dry weather the past week has caused corn to mature rapidly. Encephalomyelitis still causing loss of horses in Fallon and Carter Counties.

FERGUS: Weather extremely hot during week, except cold Saturday. Winter wheat all harvested and spring wheat harvest practically completed. Some farmers beginning to get ready to seed winter wheat, but very little wheat will be seeded until more moisture is received. Some livestock going out for feed and some beginning to move to market. Grass getting shorter due to continued grasshopper damage. About 400 to 500 farmers who have practically no crop and have no livestock are in need of some type of work in order to get them and their families through the winter.

FLATHEAD: Weather continues hot and dry, with the exception of the first part of the week when nights were cold and scattered frosts were reported. Threshing and combining of all grains in full progress, with yields continuing to run very good. Moisture reserves somewhat depleted and more moisture will be necessary to bring about a normal seeding of winter wheat. Potato yields promise to be very good. Condition of livestock very good. Lambs being shipped to market this coming week by nearly every operator in this county. Average weight of lambs very good, running 80 to 100 pounds. No movement of cattle. Labor supply adequate.

GALLATIN: Somewhat cooler; partly cloudy; increased amount of wind. Grain harvest continues in full swing. Winter planting started in nearly all dry land sections. Moisture conditions for winter wheat not as favorable as three weeks ago, because of drying winds. Haying practically completed. Threshing of seed peas under way. Fall plowing being done in nearly all irrigated districts. Pastures and range showing effects of recent drying winds. Spring calves and also long yearlings being contracted for at very favorable prices. Surplus of labor.

GARFIELD - PETROLEUM: No precipitation. General temperatures high. Growing conditions poor due to lack of moisture. Sky generally clear, with some high winds. Late feed crops, including cane and corn, are shriveled badly and making no growth. In many instances these fields are being harvested for feed by the mower-rake method. Harvesting of Russian thistles and small grain for feed practically complete. Livestock condition good. Some movement to market of stock in very good condition; however, movements are small. Some sheep and a few limited cases of cattle are being moved to pastures and winter feed in other portions of the State, largely to the southeast.

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HILL: Precipitation 0.34 inch. Harvesting 90% completed. Ranges in fair condition. Livestock in good condition. Very little movement to market. Surplus of labor.

JUDITH BASIN: No precipitation. Temperatures moderate to excessive. High winds during intervals during past week. Winter wheat harvest practically completed, with best yields going from 3 to 15 bushels. Spring wheat harvest well along. From Benchland east and south in county, practically no crops will be harvested. Over the majority of the county farmers will not get their seed back. Grasshopper damage heavy on ranges and crop land. Practically every farmer and stockman putting up Russian thistles for feed. Feed situation is very acute. Hay and concentrates will have to be shipped in in large quantities to maintain the best end of the breeding herds. Heavy demand for employment among farmers who did not harvest a crop.

LAKE: No precipitation. Hot days; cool nights. Excellent harvesting weather. Haying near completion. Some alfalfa seed being harvested. Grain threshing progressing rapidly. Most irrigated wheat yielding slightly below early estimates. Sugar beets and potatoes making good growth. Pastures getting short due to lack of irrigation water. Upper ranges in fair condition and lower ranges getting very short. Livestock is generally in good condition.

LEWIS & CLARK - BROADWATER: Cooler weather the first of the week caused a slowing of growing crops, but high seasonal temperatures the latter part of week improved the growing situation. Harvesting well advanced, with threshing in full swing. Yields on irrigated land fair, but dryland crop under normal. Potato yield fair and similar to last year or slightly under. One shipment of livestock from Lewis & Clark County topped an eastern market. Majority of stock in counties will sell in fair condition this fall. Hopper damage at a standstill.

MEAGHER: No rain. Temperature moderate. Nights considerably cooler. No freezes yet. Grass curing; still green in some localities. First cutting of alfalfa and most of hay already up. Fair crop reported. Second cutting of alfalfa hardly fair on account of irrigation water shortage. Livestock condition excellent. Most of lambs sold. Cattle and calves selling rather slowly on account of owners holding back. First shipment of calves and heifers to market this week. Second shipment of yearling ewes private sale this week. Demand still exceeds supply.

MISSOULA: Normal weather. Warm days; cool nights. One shower last of week. Excellent harvest weather. Spring grain harvest well along. Threshing well along. Some irrigated grain yet to be harvested. Yields generally below normal even on irrigated ground. Haying practically completed. Some second crop alfalfa and late timothy yet to be cut. Yields generally below normal. Sugar beets and potatoes making normal growth. Early apples coming on market. Other fruits practically all harvested. No seeding of fall grain yet; soil too dry. No change in livestock situation.

MUSSELSHELL - GOLDEN VALLEY: Extreme heat; hot dry winds. Considerable amount of dust blowing. Grain harvest season practically over. Small amount of winter wheat has been seeded. There will be no extensive winter wheat seeding until a sufficient amount of moisture is received. Livestock still looking fine, but there should be a little more moisture to help them along.

PARK: Hot winds and cool nights causing fast maturing of all standing crops and range. No precipitation. Harvesting and threshing in full swing. Seed peas all threshed. Second crop alfalfa very light in northern end of county due to grasshoppers and in some cases water shortage. Yields of dry land wheat reported up to 25 bushels, with 12 bushels probably being about average. Irrigated wheat yielding from 20 to 40 bushels. Livestock in good condition. Most of the lambs contracted for 8½¢ to 9¢. Shipments of cattle to market starting. Labor balanced.

PHILLIPS: No precipitation. Hot days and cool nights, nearing frost. Dryland harvesting about wound up, with yields of 1 to 15 bushels reported over scattered areas. Grain crops in valley normal for project. Condition of range falling off, but enough grass to carry through. Water holes drying up, but no acute shortage. Condition of livestock good.

PRAIRIE: Hot and dry; no precipitation. Sovere wind storm Friday night. About 70% of threshing completed. Yields not as good as expected. Highest yield was 9 bushels per acre. Cutting of corn has begun. Livestock in good condition. Three cases of sleeping sickness in horses reported in county. Labor supply adequat

RICHLAND: No precipitation. Hot and dry all week. Dryland farmers beginning to harvest what corn fodder they have. Irrigated farmers making preparation to harvest beets, which will start the latter part of September. Sugar beets being irrigated now and farmers report an almost normal stand. Livestock continually moving out of the county, since there is but little winter feed available. Many dryland farmers seeking employment. WPA quota still inadequate to take care of needs.

ROOSEVELT: No precipitation. Temperatures high; little wind. Harvesting of corn and millet continues in few fields to be harvested. Continued loss from horse encephalomyelitis. Continued selling of livestock and shipment out of county. Few demands for hay. 260 WPA laborers at work on roads relieves labor situation.

ROSEBUD: No precipitation. Nights cool; daytime temperature above normal for season. All grain crops harvested with threshing 90% completed in irrigated areas. Irrigated corn ripening slowly, with danger of early frost cutting yields. Some dry land corn being salvaged for fodder. Third cutting alfalfa coming into bloom. Very light crop alfalfa seed being harvested. New seeding alfalfa on irrigated land showing good stands for first time in two years. Livestock in general continue to do well except in north part of county, where water is begin-

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ROSEBUD: (Cont'd.) ning to become scarce. Sleeping sickness among horses shows little letup for the week.

SANDERS: No precipitation. Clear and cool. Light frost on 23rd, but little damage. Winter wheat being seeded on summer fallow. Insufficient moisture for germination. Grain threshing well advanced, with spotted yields running from good to very poor. Average yield for county about 60% of normal, with good quality and high protein content. Prospects for good yield of high quality alfalfa and clover seed. Truck and garden crops good. Fruit crop good. Livestock in good condition, with heavy marketing of cattle and lambs.

SHERIDAN: High temperatures and dry weather continue. No change in crop situation. Drouth prevents pasture improvement. Emergency crops have failed to develop. Movement of livestock out of State continues. No change in labor situation. Employment very scarce. Availability of relief work has aided the labor situation.

STILLWATER: Weather for week characterized by warm days and cool nights. No precipitation. Harvest practically completed except in irrigated sections. Irrigated grain turning out very well. Beets and beans making rapid growth. At the present time, there is very little moisture stored in ground. Mormon cricket control work for the year has halted. Livestock in good condition. Little movement of cattle to market as yet. Lambs nearly all contracted. There is some inquiry for breeding cattle, but at present prices it is doubtful if there will be many stocking up this fall.

TETON: Eastern quarter of county approximately 75% through with harvesting. Harvesting is general in all dry land areas, except in Pendroy area where it will not get started until next week. Southern half of county through the Beck-Cordova-Power area reports they will not have sufficient wheat for their seed requirements. In the big wheat area between Choteau-Dutton-Collins, dry land wheat will probably run about 2 to 3 bushels on the seeded acreage. Many fields completely abandoned in central and southern parts of county. In eastern edge of county, yields are running between 6 and 7 bushels on seeded acreage. The wild hay crop in the county is the poorest it has ever been, according to most of the old timers. Even though livestock numbers have been greatly reduced the past two years, there will undoubtedly be further liquidation this fall due to shortage of feed.

TOOLE: Hot and windy forepart of week; cool and cloudy latter part, with light rains. About 75% of wheat combined or headed, with yields generally higher than expected. Good number of fields have gone from 12 to 15 bushels. Combine results would indicate that the county will average about 9 bushels. Heavy winds forepart of week shattered out considerable grain in some localities. Mustard crop will average in the neighborhood of 200 pounds, this being below the general average. Ranges have dried up considerably the past two weeks, but are adequate for the smaller number of cattle in the county; considerable local sales being made. Sufficient labor available.

VALLEY: Past week characterized by warm weather with no precipitation. Frost reported in northern part of county last week, which resulted in no serious damage. Dry land harvest completed. Harvesting in the irrigated sections well under way. Irrigated crops and sugar beets looking good. Livestock in fair condition, and continued movement of cattle, sheep, and horses from the county.

YELLOWSTONE: Hot, dry weather for past week; nights cool. Threshing in irrigated areas well along, with better than average yields of oats and barley. Wheat practically all combined and threshed. Beets and beans in good shape. Garden produce a little light, but good yields reported. Livestock in good condition. Practically all lambs contracted. Cattle prices excellent.

SUN RIVER PROJECT: Weather conditions dry, with high winds several days during week. Cutting of seed peas and grain well under way. Wind causing some damage to overripe fields. Second cutting of hay started on most farms. Sugar beets continuing in good shape, with good growing conditions. Very little irrigation water being used. Ample labor supply.

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Helena, Montana,
August 31, 1937.

UNITED STATES DEPARTMENT OF AGRICULTURE
Weather Bureau —— Bureau of Agricultural Economics

REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA
For the Week Ending Tuesday, September 7, 1937.

Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau.
Offices: Fourth Floor, Federal Office Building, Helena, Montana.

The first part of the week was warm and dry; the last part was cool, with light to heavy rains on the 5th and 6th featuring the greatest weekly precipitation for about half of the State since mid-July. Precipitation was rather spotted, amounts varying from one-half to one and three-quarters inches occurring in the central third of the State, and moderate amounts of less than one-half inch falling in parts of the northwestern and east-central sections. Most of the east and the southwest received only light rainfall. Temperatures remained sufficiently high at nights for avoiding damaging frosts, and generally favored growth of late maturing crops. Severe damage to crops from frosts during late August appears to have been confined mostly to corn, potatoes, and tender garden stuff in scattered northern and western localities. Heaviest damage so far has occurred in Flathead County.

Plowing and seeding operations in the greater part of the winter wheat belt were helped by the week's rains, and germination of wheat already seeded was stimulated. Good rains are still needed in this connection in much of the east and west-central districts, where mostly dry conditions continue. Threshing made good progress until interrupted by rain near the end of the week. Except for some extreme northern localities and late irrigated sections, harvesting and threshing are now largely completed, with yields of small grains generally low on dry-lands, and about average on irrigated lands. Recent weather conditions have favored rapid maturing of the bean crop, and harvest is now under way in several districts. Most bean yields will be good; some in the south are regarded only fair. Sugar beets are expected to produce record yields in some districts. The crop is now taking on the color of the ripening stage, and harvest is expected to start in some northern districts by the 16th. Dryland potatoes are poor to fair; irrigated potatoes are good. Most of the potato crop dug so far has yielded well and comprises the early planted crop; the main crop of potatoes remains to be harvested. While some corn has failed in the east as a result of continued dryness, the greater part of the crop has developed satisfactorily and is yielding a fair amount of fodder for supplementing thistle and a rather poor late forage crop. Cutting of corn for fodder continues. Cutting of the third crop of alfalfa is under way in the east.

Ranges and pastures over a large part of the State were freshened by the rains on the 5th and 6th, but in the southwest and east continued very dry and in further need of good rains. Livestock are still in fair shape in the east despite poor feed conditions north of the Yellowstone River. Lower ranges and pastures are also short in some central and west-central districts. In other parts of the State, feed generally continues ample and livestock in good condition. Prices for livestock continue good, but movement marketward has not increased much. Sheep are being moved out of the mountain ranges, and there is also continued movement of livestock from areas where feed is lacking to areas where they may be held through the winter or for late fall fattening. Hay continues to be shipped into the northeastern counties.

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TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING SEPT. 7, 1937

Station	Temperature. Highest	Temperature. Lowest	Sunshine % of Possible	Precipitation (inches and hundredths) Total This Week.	Total since April 1, 1937.	Total April 1 to Sept.8,1936.
Billings	92	52	*	0.69	7.72 #	5.34
Bozeman	84	41	*	0.88	10.38	6.34
Cut Bank	82	39	*	1.81	8.33	9.02
Fort Peck	88	54	*	0.01	4.34	2.88
Glendive	94	54	*	0.40	6.98	5.74
Great Falls	88	45	*	0.28	6.01	5.09
Havre	86	48	72	0.44	8.00 #	4.11
HELENA	86	43	60	0.04	5.20	6.00
Kalispell	84	44	72	0.38	6.34	5.27
Lewistown	86	40	*	0.97	7.70	7.66
Malta	87	46	*	0.10	6.79	4.03
Miles City	92	56	64	0.05	6.74	2.98
Missoula	92	48	70	0.10	3.88	5.84
Poplar	90	41	*	0.00	5.33 #	5.81

Corrected to agree with August amount. * No data.

Series - 1937 - No. 22.
Helena, Montana.
September 8, 1937.

W. E. Maughan, Weather Bureau.
Jay G. Diamond, Bureau of Agricultural Economics.

The following county summaries of crop conditions for the week ending Sept. 4, 1937 are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: No precipitation. Very dry. Some frost. Threshing under way. Yields fair. 1937 alfalfa crop short. Livestock in good shape. No movement. Some livestock has been sold.

BIG HORN: Warm weather, with no precipitation. Threshing of small grain about completed. Beans will be harvested this week. Beets making splendid progress with prospects of the best crop in years. New factory nearing completion; slicing of beets to begin about October 1st. Livestock in good condition and ready for market; shipments just beginning. Labor balanced.

BLAINE: Clear sunshiny weather, with moderate temperature. Harvesting on dry land about completed. Threshing well under way in the Milk River Valley. Beets are making rapid growth. Beet harvest will start September 15th. Livestock in fair condition. No movement to market as yet. Good demand for feeder lambs as well as young ewes. Range in fair condition.

CARBON: No precipitation; weather unsettled. Approximately two-thirds of the beans have been harvested and are in the shock. Some very good yields are in prospect, but the majority feel that the yields will be a little short. Bean crops have ripened very unevenly. Threshing of grain in irrigated fields still continues and also in the Luther territory. Last irrigations have been given to all crops with the exception of beets. Dry land pastures fair; stock in good shape.

CHOUTEAU: One-half inch rain covered a large area of the county. Moisture sufficient to start large numbers seeding wheat. In general all wheat harvest completed. Winter wheat seeding well under way since rain early part of week. Moisture in sub-soil varies from 5 inches to over 42 inches; especially favorable in Geraldine and Highwood communities. Insects now very thin.

CUSTER - POWDER RIVER: Continued dry weather except thunder shower in south country Monday night. Sugar beets and alfalfa under irrigation continue to make good growth. Dry land corn harvest finished with very light yields. Some wild hay still being put up. Tongue River ditch running full again due to heavy shower on tributary streams of Tongue River in Western Powder River County. Water situation relieved temporarily. Cattle continue to move to market, but volume very light. Sheep outfits looking for range and feed on south side. Some operators planning to liquidate at present prices.

DANIELS: No precipitation except for hail storm on west end of county. Temperatures generally lower. Crop and livestock conditions unchanged.

DAWSON: Seasonable, with no precipitation. Harvesting and threshing practically completed, with small yields. Grass dried out. Livestock are being shipped out.

FALLON - CARTER: Continued hot dry weather. Harvesting of grain crops completed. Corn and feed crops still being put up. Threshing of headed grain is under way. Yields running from 2 and 3 up to 15 bushels per acre. On the average throughout the county about 5 bushels per acre of wheat. Livestock in good condition. Lambs showing good gains. Encephalomyelitis disease of horses decreasing.

FERGUS: Continued dry. Harvest practically completed. Farmers ready to seed winter wheat if and when moisture comes. If no moisture comes during early September, very little winter wheat will be seeded. Russian thistles being put up for hay. Corn has developed quite satisfactorily this year and will produce some feed to supplant hay and thistles. Stock moving to market. Prices received are generally lower than shippers expected, with top beef selling so high. Cattle mostly in fair to good condition. Many farmers needing work to carry them through the winter.

FLATHEAD: Killing frost first part of week resulted in nearly 100% kill of all corn and gardens. Some damage done to other green forage crops. Weather has been ideal for threshing and combining, with yields above average. Potato crop will be better than the past few years. Very little seeding of winter wheat done due to dry soils, except those summer fallowed. Condition of livestock continues very good. Most of the lambs moved to market this week.

GALLATIN: Warm and clear forepart of week. Few local showers latter part of week. Some wind. Grain harvesting still continues. Fall seeding is well under way in most of the dry land sections, and fall plowing continues in irrigated districts. Threshing of seed peas well under way. Range and pastures dry from recent winds.

GARFIELD - PETROLEUM: No precipitation. Warm days; some cloudy cool nights. Growing conditions poor because of lack of moisture. Gardens and irrigated crops maturing slowly. No change in crop conditions. Movement of livestock to market slightly increased. No change in condition of livestock.

GLACIER: Frost in northern and western parts of the county. Weather mostly cool and cloudy. A few light showers in the early part of the week. Harvesting progressing satisfactorily. Some fields still a little green for combining. A few fields of winter wheat planted and conditions for this crop look good. Yields on spring wheat run from 8 to 22 bushels. Some late irrigation on alfalfa fields being done. Pastures in good condition. Shipments of livestock continue; prices fair and stock in good condition. Livestock wanted for wintering.

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HILL: - No precipitation. Harvest 95% completed. Ranges in just fair condition. Livestock fair to good condition; little movement to market. Surplus of labor.

LAKE: - No precipitation. Frosts throughout county damaging some of the tender plants. Some potato vines completely killed; others slightly injured. Threshing of small grains nearing completion. Some clover and alfalfa seed being threshed, with yields slightly above average. Some winter wheat being seeded; however, soil is very dry. Last of irrigation water is being used on sugar beets. No change in livestock situation.

LEWIS & CLARK - BROADWATER: Scattered showers the latter part of week helped freshen ranges. Temperatures generally cool, with light frosts reported in parts of both counties. Winter wheat seeding in full swing. Moisture conditions in general not favorable for germination of winter wheat. Second crop of alfalfa yielding normally and mostly all in stack. Grass and hay conditions very spotted, with average conditions a trifle better than 1936.

MADISON - JEFFERSON: Trace of precipitation. Frost in lower areas damaged corn, tomatoes, and some potato vines, but did not result in a great deal of damage. Threshing progressing, with fair to good yields. Some late grain still very green and in danger of being frozen. Potato harvest continuing. Nearly all wild hay in the stack; still cutting second crop alfalfa. Some lambs moving to local markets at 9¢. Stock in good condition. Fall pastures in excellent condition. A few breeding sheep sold to outsiders during past week at favorable prices. Cattlemen preparing to bring stock off reserve in next few weeks.

MEAGHER: No rain; cooler; light frosts. Haying about finished. Most of grain cut. Only a little oats and barley left for harvest. Dry land grain very late. Irrigated grain fair to good where undamaged by hail. Livestock in excellent condition. Sheep beginning to come out of mountains. Some unusual trailing loss. Fall shipment not yet begun. Labor supply a little ahead of demand. Hopper damage 90% to range in some scattered areas.

MISSOULA: Seasonal temperatures. Warm days; cool nights. Light frosts first of week. Potatoes, corn, tomatoes, etc., killed in some communities by frost. No frost damage in other communities. Threshing of small grains nearly completed. Haying practically completed. Sugar beets making good growth. Ranges and pastures short. Cattle in fair to good condition.

MUSSELSHELL - GOLDEN VALLEY: No precipitation; hot dry winds. Harvest season is practically over. There is a small amount of corn and feed crops to be harvested for feed. Winter wheat seeding is very slow this year, as there is not a sufficient amount of moisture to make it safe. Livestock are still looking fine, but some are being shipped out for feed while in other localities some are being shipped in.

PARK: Hot days with some windy and cloudy weather, but no precipitation. Cool nights. Harvesting of all grain except late stuff nearly completed. Good yields on both dry land and irrigated grains. Second crop alfalfa all stacked. Alfalfa hay being quoted at $8.00 in stack, and a good supply of fall rye in the county, some of which is selling for $1.25. Fall seeding being delayed until moisture is received. Some movement of cattle to market, with some lots of calves bringing 8½¢. Lambs practically all sold, some bringing 9¢. Labor balanced.

PHILLIPS: Light shower last Saturday, but no precipitation since. Cooler, with nights approaching frost. No severe frost damage. Harvesting and threshing nearly completed, with satisfactory yields in valley. Dryland grain crops about 10% of normal; feed crops about 50% of normal, except in northeast one-fourth of county where all crops failed. Alfalfa seed crop spotted and will probably approach 25% of normal. Livestock condition good. Decline in range condition and water supply noted. Large supply of hay in valley, although some may be shipped in if local prices remain relatively high.

PONDERA: Weather cool and bright; no precipitation. Harvest of wheat has been spasmodic, due to uneven ripening. Yields on the North Bench will probably average 15 bushels per acre; the Brady section, approximately 8 bushels; and the Valier section will exceed 12 bushels. The county as a whole in all probability will make an average of about 10 bushels per acre. Practically all oats and barley have been cut for feed, much of which will be fed in the bundle. Production of hay larger than expected by approximately 8000 tons. Many farmers securing the third cutting. Practically all range pastures produced good seed crop this year, and will have natural reseeding where deferred grazing was used. Little trading in livestock. No movement is anticipated out of the county except normal sales. Labor balanced.

PRAIRIE: No precipitation; weather hot. Too dry and hot for any growth. Harvesting completed; yields disappointing. Farmers salvaging what corn they can for fodder. Equine Encephalomyelitis continues to spread among the horses. Cattle and sheep are holding their own on the ranges, but will go into the winter with small feed supplies available. Labor supply is ample.

(Continued on Page 3.)

RICHLAND: No precipitation. Warm throughout week. Threshing of grain completed in valley with rather low yields due to grasshoppers, lack of moisture, army worms, etc. Third cutting of alfalfa hay being made at present time. Farmers still irrigating beets and making preparation for harvesting of sugar beets, which will start within the next two weeks. Livestock being moved to market. The quota on W.P.A. has been reduced rather than increased, and farmers are seeking employment.

ROOSEVELT: Scattered showers varying from nothing to seven-tenths of an inch Wednesday night, accompanied by hail. Temperatures normal. Most feed crops are harvested. Late seedings of feed crops have not developed because of drouth. Harvesting of thistles completed except in isolated cases. Cattle continue to be shipped mainly to market. Most ranges which had benefitted from July rains are badly in need of moisture to produce fall pasture. Approximately 550 men on W.P.A. quota. More will need work or relief this winter.

SANDERS: No precipitation. Warm days and cool nights. Grain threshing continues, with good yields under irrigation and fair to poor on dry lands. Some second cutting alfalfa still being stacked on irrigated lands. Alfalfa and clover seed crops maturing, with evidence of heavy yields and good quality seed. Fruit crop good. Early apples on market. Potatoes and garden produce good. All irrigation water exhausted for past several weeks. Seeding winter wheat being delayed on account of insufficient moisture for germination. Livestock in good condition. Heavy shipment of range cattle and lambs continues.

SHERIDAN: Temperature moderating to some extent. Scattered showers throughout the county. Additional precipitation needed for pastures. Livestock on pasture require additional feed in many instances. Movement of stock to feed and market continues. Some feed being shipped into county. Little employment available. W.P.A. work relieving labor situation to some extent.

STILLWATER: Continued hot weather during entire week. Practically all threshing and harvesting completed. Wheat of good quality and weight. Second cutting of alfalfa all in stack. Good quality hay. Beets and beans promise to make good yields. Seeding of winter wheat started in some parts of county. Decided lack of moisture to start winter wheat. Livestock in good condition, but no large movement to market.

SWEETGRASS: Weather has been very warm during the day and cool at night. Trace of precipitation. 80% of later crops being harvested. Yields on irrigated grains - wheat 35 to 55 bushels per acre and oats 40 to 70 bushels. Average of dry land wheat is 6 bushels and oats cut for hay. 60% of second cutting alfalfa in stack. 60% of normal yield. Livestock gaining weight on grass. Fat cows and heifers and 2 and 3 year old steers being marketed. Few sales of calves. Lambs all contracted. Aged ewes being contracted. Considerable inquiry for feeding sheep and cattle.

TETON: Light frost in the Pendroy-Bynum areas. Some damage to gardens. Both days and nights cooler than normal. Farmers encountering difficulties in cutting wheat due to unevenness of ripeness and weeds. East of Dutton seeded acre yields will possibly be not more than 4½ bushels. Some good crops harvested near Pendroy. Few isolated places around Pendroy report as high as 20 bushels per acre; however, it is estimated that 75% of the dry land farming area will just about get their seed back. Considerable damage done to range by hoppers. Grass seems to be very brittle. Livestock will probably start moving to market next week.

TOOLE: Days fairly warm; cooling off nicely at night. Weather good for harvesting. Practically all grain cut with exception of late seedings. Ten more days will probably see the entire crop in Toole County cut. Livestock condition good; some cattle moving to market, but marketings considerably under previous years.

VALLEY: Temperatures varying greatly during the past week; however, mostly very warm. Moisture shortage still acute. Trace of precipitation in western part of county, with heavy showers and some hail in Opheim area. Dry land harvest completed. Irrigation harvesting getting well along. Operators in irrigated sections are having to irrigate before proceeding with fall tillage practices. Range conditions poor and cattle moving fast.

WHEATLAND: Warm weather, with cool nights. No moisture. Harvest of dry land grain crops nearly completed. A few stockmen moving stock out of forests on to bench range. A few lambs moved out during the week. Some movement of cattle to market during the week.

YELLOWSTONE: Cool, dry weather. .08 inch precipitation. All irrigated threshing practically completed; dry land harvesting is completed. Beans are being harvested. Beets are looking good and beans fair. Livestock in good condition.

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Helena, Montana,
September 8, 1937.

UNITED STATES DEPARTMENT OF AGRICULTURE
Weather Bureau ---- Bureau of Agricultural Economics

REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA
For the Week Ending Tuesday, September 14, 1937.

Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau.
Offices: Fourth Floor, Federal Office Building, Helena, Montana.

The week just ended was favorable for all outside farm work and maturing of late crops, but too dry for pastures, ranges, and fall seeding operations. While rains of the preceding week brought some benefit to northwestern, central, and southern districts, they were not heavy enough generally to put soils in good shape where they occurred, and missed almost entirely much of west central and northeastern Montana. Some farmers are still waiting for additional soil moisture before seeding winter wheat and rye. During the week daytime temperatures ranged mostly in the eighties and nineties, accompanied by cool nights, but with no frosts reported. Precipitation was negligible, with none reported west of the Divide and throughout most of the northern districts and only light showers Wednesday and Thursday in scattered localities in those southern counties lying east of the Divide.

Except in some irrigated sections and in the western portions of the north central counties, harvest and threshing of small grains is now practically completed. Late crops such as corn, potatoes, and beans are being harvested in the southern districts and maturing rapidly elsewhere. Beans are mostly in the stack in the important producing counties of Carbon, Yellowstone, and Big Horn. Hail on the fifth damaged beans, late alfalfa, and some sugar beets south of Billings. Sugar beets are still growing in most districts, with yield prospects reported quite favorable. The crop is almost ready for harvest in Rosebud County. Where frosts killed potato vines, some fields will be harvested within the next ten days, but harvest generally is not expected to get under way much before the end of the month.

Livestock continued to make gains except in the northeast and east central counties, where movement to market that started in August because of drouth is still reported in considerable volume. Cattle marketings are beginning to pick up from such counties as Judith Basin, where 14 cars were loaded last week, and from Wibaux, where 75 carloads were shipped out. Reports of marketings also come from such counties as Fergus, Blaine, Glacier, Park, Lewis and Clark, and Broadwater. Considerable numbers of cattle and sheep are still on summer range in the mountains, and indications point to the peak of the fall livestock movement coming normally during the last week of September and first part of October.

Although better than last season, the growing season moisture of 1937 (April-August) was below normal throughout the State except for a few scattered localities in northwestern, north central, and extreme southeastern Montana. In west central, part of central, and in extreme northeastern Montana the 1937 amounts were below those of 1936. During the months of September, October, and November the amount of precipitation received will determine to a considerable extent the spring wheat crop of 1938. Summerfallow fields generally now contain much less than a normal storage of moisture. September rainfall to date has averaged less than normal, and was negligible in northeastern and parts of east central, southeastern, and west central Montana.

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TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING SEPT. 14, 1937

Station	Temperature. Highest	Temperature. Lowest	Sunshine % of Possible	Precipitation (inches and hundredths) Total This Week.	Total since April 1, 1937.	Total April 1 to Sept.15,1936.
Billings	88	50	*	0.01	7.73	5.66
Bozeman	80	43	*	0.17	10.55	6.46
Cut Bank	83	36	*	0.00	8.33	9.09
Fort Peck	91	48	*	0.01	4.35	2.88
Glendive	91	47	*	0.00	6.98	6.11
Great Falls	88	46	*	0.00	6.01	5.32
Havre	86	46	94	0.00	8.00	4.15
HELENA	84	47	81	0.02	5.22	6.18
Kalispell	84	44	98	0.00	6.34	5.38
Lewistown	86	40	*	0.09	7.83	7.67
Malta	87	43	*	0.00	6.79	4.06
Miles City	92	50	74	0.05	6.79	3.18
Missoula	90	48	90	0.00	3.88	6.01
Poplar	91	41	*	0.00	5.33	5.81

*No data.

Series - 1937 - No. 23.
Helena, Montana.
September 15, 1937.

W. E. Maughan, Weather Bureau.
Jay G. Diamond, Bureau of Agricultural Economics

The following county summaries of crop conditions for the week ending Sept. 11, 1937, are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: Rain and hail in some sections of county. Slight damage by hail in the Beaverhead Valley. Majority of seed peas cut with threshing under way. Yields light to fair; same with grain. Livestock in good shape. Lambs being shipped.

BIG HORN: Warm days and cool nights; light showers and hail, which did some damage through the center of the county. Much of the winter wheat is seeded, but soil is too dry to germinate. Growing conditions not so good. The small grain is all harvested and threshed. Beans in stack. Third cutting hay about complete. Corn is good and is being cut. Beets making good progress and harvest will begin about the 25th of September. New sugar factory nearly complete and ready for harvest. Cattle moving to market in regular order. Labor ample.

BLAINE: Precipitation amounting to approximately one inch fell in all parts of the county on September 5th. Growing conditions for late crops have been satisfactory during past week. Temperatures about normal, with clear sunshiny days the latter part of week. Threshing about completed. Sugar beets making excellent growth. Livestock in good condition, with some movement to market during past week. Range shows some improvement due to recent rains.

CARBON: Precipitation .26 inch fell in Red Lodge area on Saturday and Sunday. Practically all beans have been harvested and there are only a few fields left. Threshing of beans almost ready to start. Beans have been very uneven in ripening this season, this being the major cause for the early cutting. Approximately one-third to one-half of the corn has been cut and shocked thus far. Fairly large corn acreages are in evidence in the county this season with prospects for fair yields. Threshing of wheat in full progress in Luther section. Sugar beets making very good growth with good prospects for a heavy yield. Livestock in good condition.

CASCADE: Precipitation 0.25 inch fell Saturday night and Sunday morning, which did some good to range land but was not enough to be of any benefit to summer fallow. Winter wheat is about 90% completed. Some farmers are waiting for more moisture. Second cutting of alfalfa hay is practically in the stack, and the harvesting of small grains on irrigated land is well under way. Livestock is in good condition with ample feed in sight. Labor normal.

CHOUTEAU: Winter wheat seeding continues following light rain. Moisture insufficient, however, in most sections of county. Light rain over scattered areas, especially in Highwood section. Weather mild and above normal temperature for this season. Labor unchanged.

CUSTER - POWDER RIVER: Generally much cooler with a few light scattered showers. Heavy rain and hail in northeast end of Custer County forepart of week. No damage reported. Very little or no soil moisture over most of the area. Third crop of alfalfa under irrigation ready for cutting. Sugar beets maturing. Water supply again short in Tongue River, but probably sufficient for remainder of the season. All stock in good condition but ranges dry. Grass and hay ample for wintering present livestock population.

DANIELS: No precipitation. Cool and cloudy during most of week. Crop situation unchanged. No activity. Movement of livestock out of county continues. Some hay being shipped. A surplus of labor available. Grasshoppers and other insects disappearing.

DAWSON: Heavy rains in portions of county forepart of week offered some opportunity for working ground, but was of no extended value. Nights have been cool, but no frost. Scattered harvesting has about finished, with growers getting seed or a little less. Stacking of roughage continues, including thistles. Portions of county will feed its depleted livestock numbers, but remainder will require outside feeds and concentrates needed generally. Corn is furnishing largest amount of good feed, and shown its value. Livestock shipments continue, with northern portion of county cutting severely. Lambs in large portion of county looking good. Army cutworm millers have been tremendously thick the past ten days to two weeks.

FALLON - CARTER: Heavy thunder shower this past week with precipitation varying from one-half to .78 inch. Strong winds accompanied moisture. Although some moisture fell this week; in general fields are not in condition for winter wheat seeding. Some winter wheat will be seeded if more moisture is received. No reports of encephalomyelitis this past week. Stock in good condition.

FERGUS: Generally hot during week. Scattered local showers. Harvesting all completed. Winter wheat being sown on summer fallow where showers happened to have hit. Many waiting for moisture before starting to seed. Livestock moving to market more rapidly now, with most of stock in fair condition. Quite a bit of cottonseed cake will have to be shipped in this winter to supplement straw and thistle feed which has been piled up. 400 farmers who have no income because of drouth still in need of work in order to help them get through the winter.

FLATHEAD: Scattered rain throughout the county during the first part of the week. Hot and windy the latter part of the week. Threshing and combining nearing completion. Labor adequate.

GALLATIN: Rain forepart of week; clear latter part. Some hail damage in northern part of county forepart of week. Harvest continues after delay due to rain. Winter wheat seeding well under way, with improved soil moisture conditions due to rains. Considerable amount of fall plowing being done. Fall movement of feeder calves started.

(Continued on Page 2.)

GARFIELD - PETROLEUM: Cool, cloudy several days. Scattered showers. No frost. Any maturing crops are slow. No change in crop conditions. Livestock condition good. Small amount of movement.

GLACIER: Weather dry and cool in the last part of week. Heavy rain, about half inch, fell during the early part of week. Frosts have been reported from various parts of the county but no severe damage to crops has been noted. A few acres (about 200 acres) have been planted. Harvesting is still suspended by reason of rain in early part of week. Some shipments of livestock continue. Beef cattle and horses in good shape. Labor adequate.

HILL: Precipitation 0.44 inch during week. Practically all harvest completed except on very late sown grain, which is slowly maturing. Ranges fair. Livestock improving. Surplus of labor.

JUDITH BASIN: Scattered showers throughout county. Cloudburst in western portion of county. Temperatures moderate. Growing conditions slightly improved. Some fall wheat being seeded, but many farmers will await improved moisture conditions. Most of harvesting now completed. In some sections wheat going from 3 to 6 bushels per acre; western portion of county running from 5 to 25 bushels; in central and eastern portion most farmers will not get their seed back, and in many cases no crop will be harvested at all. Insect damage reducing. First large shipment of cattle sent out last Tuesday; 14 cars being loaded from Stanford. Heavy shipments are expected to continue throughout September. Reduction of 30% on all breeding herds is expected. Many cattle being trucked to local markets. Farmers in need of labor. Other labor balanced.

LAKE: Scattered showers first part of week. Weather warm with cool nights. Harvest of grains practically completed. Fall seeding is well under way in most of dryland sections. Irrigation farmers starting to do fall plowing. Sugar beets making good growth. Lower ranges and pastures are rapidly drying. Livestock in good condition.

LEWIS & CLARK - BROADWATER: Scattered rains reaching cloudburst proportions in some parts of counties. Frosts generally have damaged corn and garden products, but not much alfalfa has been harmed. Harvesting and threshing well along. Yields vary from no grain to fair yields, with averages running very low on dry land. All irrigated crops fair on an average for both counties where a reasonable amount of water was available. Stock gradually moving to market in fair condition. Marketing will be more orderly than last year due to slightly better grass conditions in most areas in both counties. Grasshoppers have done an appreciable amount of damage on range and crop land this past season.

MADISON - JEFFERSON: Heavy showers forepart of week over most of both counties, with additional local showers in a few areas throughout week. Nights cool; days pleasantly warm. Conditions good. No frost during week. Showers delayed threshing somewhat early in week, but rapid progress now being made. Many yields of peas going below expectations, probably due to exceptionally dry period early in season. Much dry land grain yielding slightly higher than expected, with quality better than in past few years. Livestock conditions still remain good, with rains giving ranges a little benefit. Very little activity reported in sale or movement of stock.

MEAGHER: Two good rains; cool; only light frosts. Hay crops reported as only fair. Already some inquiries to purchase hay. Dryland grain yields light. Irrigated grain not yet threshed. Livestock condition very good. Little activity this week in country buying of cattle. Prices a little weaker than last week. Second shipment of she stock yesterday. No movement of dry stock cattle. Lambs practically all sold; none delivered. Supply and demand of labor about equal. Ditch and reservoir work absorbing some seasonal surplus.

MISSOULA: Seasonal weather; warm days, cool nights; no frost reported; no rain. Haying, harvesting, and threshing practically completed in all parts of county. Potatoes damaged by frost last week are ripening. Undamaged fields still making good growth. Sugar beets making good growth where water is available. No sub soil moisture for fall grain seeding. Cattle generally in fair condition. Some cattle have been brought in from lower ranges to farm pastures. Some cattle have been sold.

PARK: Continued hot days, with cool nights; two good rains during week. Threshing in full swing with high yields of all grains both on dry and irrigated land. Livestock in good shape and quite a bit moving to market. Labor balanced.

PHILLIPS: Light shower over small area Sunday. Cooler, but no general killing frosts. Grain harvest completed, with generally unsatisfactory yields on dry land. Beet pulling to start in week or ten days. Condition good, for livestock. Range feed and water situation not changed materially. Stockmen planning to sell down to feed supply for winter.

PONDERA: Precipitation .97 inch at Conrad, ranging to 1.23 high east of Ledger to low of .66 at Valier. Otherwise, weather warm and bright. Harvesting is proceeding by slow stages. Wheat not ripening very fast. Heavy dews prevent harvesting in forenoons due to abundance of moisture. Combines and binders are chief methods of harvesting now. Wheat still averaging about 10 to 12 bushels in some areas, with a few reports coming in as low as 4 bushels. Irrigated wheat ranging from a high yield of 40 bushels down to 25 bushels per acre. Some wheat sprouting in shock. Considerable volunteer wheat coming up as natural cover on fallow. Oat and barley crops all harvested as reported a week ago. Range grass growing in some areas, but soft and succulent. Livestock losing weight; need supplement and dry feed to balance. Weed or natural cover growing tremendously all over county due to moisture and warm days. Cover crops obtaining growth of five inches. Rather uniform throughout. Livestock movement at a standstill. Plenty of labor.

(Continued on Page 3.)

PRAIRIE: Weather has been a little cooler, with scattered precipitation. A cloudburst occurred in the Zero area Sunday evening, flooding fields, the highway and the Northern Pacific tracks. Only a light shower fell in Terry, accompanied by considerable dust and wind. Crops ripened, harvested, and mostly threshed, with the yields rather disappointing. Ranges dry. Livestock in good condition. Most of the lambs are contracted. Labor supply ample.

RICHLAND: Slight precipitation the forepart of week. Cool and cloudy throughout entire week. Irrigated farmers cutting corn at present time, with yields very good. Silos are being filled for the winter supply. Farmers are irrigating beets at this time and expect to have to irrigate once more before harvest. Livestock continue to move to market. Many farmers seeking work since WPA quota has not been increased.

ROSEBUD: Local showers in some areas and a general rain throughout county latter part of week have filled all water holes, freshened up range feed, and alleviated danger of range fires. Irrigated corn being put into shock. Preparations under way to start beet harvest within a few days. Record crop in prospect. Some winter wheat being seeded. Limited amount of alfalfa seed remains to be threshed. Livestock generally in excellent condition. Trading still active on dry cows and steers. Dry land farmers seeking work on WPA projects.

SANDERS: Total precipitation .39 inch. Early part of week cloudy, with rain and light frost. Latter part of week clear, with warm days and cool nights. Temperatures too low for much crop growth. Grain threshing well advanced. Winter wheat seeding on summer fallow under way. Recent rains not sufficient to insure germination. Very light third cutting alfalfa under irrigation, account of water supply exhausted. Garden and truck crops generally in good condition. Livestock in good condition. Shipment of range cattle to market continues. Heavy marketing of lambs to eastern markets.

SHERIDAN: Temperatures have lowered considerably. No precipitation. Harvesting of thistles completed in most localities. Crop conditions unchanged. Movement of livestock continues. Ranges in very poor condition. Approximately 480 men working on WPA at present. Conditions indicate that a larger number will need employment in the near future.

STILLWATER: Weather continued warm with cool nights. Scattered showers in some sections and some hail with little damage. Practically all harvesting done, with seeding in full swing. Badly in need of rain to start fall seeding. Livestock in good condition. No great influx of cattle to market.

SUN RIVER PROJECT: Light showers latter part of previous week, with continued warm weather. No damaging frost. Harvest being completed very rapidly. Some fields of grain still green and may be frosted unless frost holds off ten days.

SWEETGRASS: Weather cooler. Frost in some communities, hail in parts, destroying gardens. Precipitation was .25 inch. Threshing checked for two days on account of rain but under way again. Second cutting of alfalfa being harvested; third alfalfa crop for pasture growing rapidly. Livestock gaining on ranges. Local pasture in dry area depleted. Livestock being moved to meadows or other pastures.

TOOLE: Extremely good rains over entire county, varying from 1.34 to nearly 3 inches. Rains have delayed late harvest, but over 80% is harvested at present time. Summer fallow in good moist condition throughout county. Recent rains have filled practically all reservoirs to overflowing, insuring water for remainder of year.

VALLEY: Temperatures have varied throughout week, with some cloudy weather. Some precipitation in Opheim area. Harvesting practically completed. Fall irrigation getting under way previous to fall tillage. Sugar beet harvest expected to start middle of September. Apparently enough hay to maintain livestock which will remain in county. Livestock moving fast.

WHEATLAND: North part of county experienced exceptionally heavy rain. Cool nights and warm days. Crop conditions same as last week; no change.

WIBAUX: Warm weather. Precipitation at Wibaux 0.3 inch. Heavy hail and cloudburst in southern part of county. Some winter wheat and rye will be planted this fall. Corn crop is fairly good and is being harvested. Potatoes and gardens are very poor on the average. Approximately 75 carloads of cattle have been shipped out. Remaining livestock in good condition. Ranges in fairly good condition.

YELLOWSTONE: Precipitation .76 inch. Weather warm. All grain crops harvested. Bean harvesting about two-thirds through. Beets looking good. Third crop of alfalfa being cut. Severe hail storm swept area about 10 miles long and about 4 miles wide, west and south and southwest of Billings last Sunday. Beans in this area 90% ruined and beets are badly damaged, also alfalfa. Gardens suffered heavy damage south and west of Billings. Livestock in excellent shape. Practically all lambs contracted.

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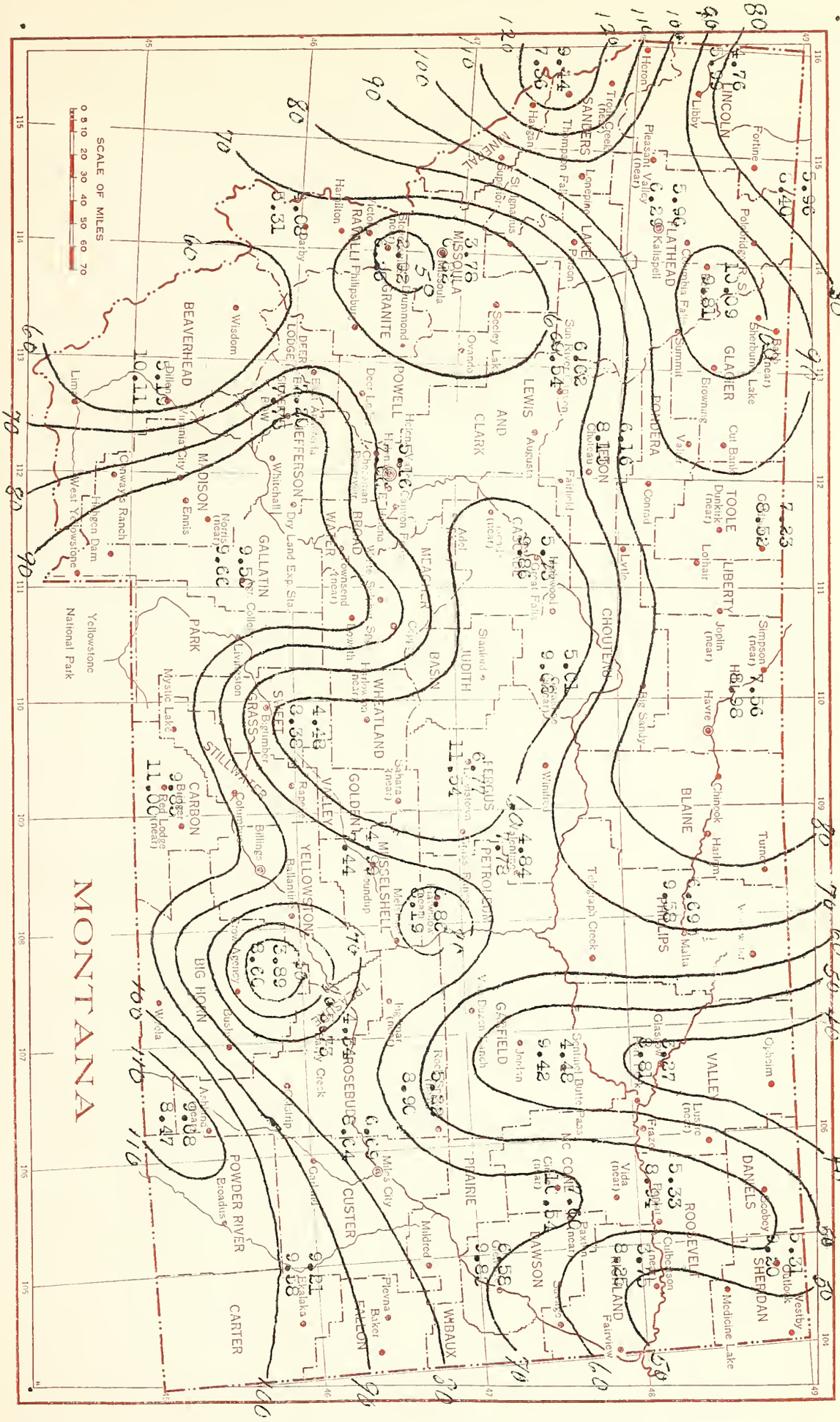
Helena, Montana,
September 14, 1937.



This map shows the percentage of normal precipitation that has occurred in Montana during the first five months, April to August, inclusive, of the 1937 crop growing season.

The upper of each typed pair of figures indicates the actual amount of precipitation that occurred in that respective area during the period April to August; the lower figure of the pair indicates the normal precipitation for the same period.

Lines are drawn for each 10 per cent of normal.

U.S. Weather Bureau,
Helena, Montana

UNITED STATES DEPARTMENT OF AGRICULTURE
Weather Bureau ---- Bureau of Agricultural Economics

REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA
For the Week Ending Tuesday, September 21, 1937.

Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau.
Offices: Fourth Floor, Federal Office Building, Helena, Montana.

Unseasonably dry warm weather characterized the first five days of the week just ended, accelerating the maturity of late crops and enabling dryland farmers with crops to harvest to complete most of such work. At the close of the week the weather turned much cooler. This change to cooler weather was accompanied by rainfall that was heavy in the vicinity of Helena, with light to moderate amounts reported at Cut Bank, Havre, Great Falls, Lewistown, and Bozeman. Most of eastern Montana and extreme western Montana reported only a trace of rain. Light frosts were reported early in the week from the extreme northeastern sections.

During the past week harvest and threshing of small grain crops was reported as being practically completed. Cutting of corn for forage continues, with a large proportion of the acreage being utilized in this way as a result of drouth damage. Most beet fields and many potato fields are still growing in the absence so far of general killing frosts, the occurrence of which can now be expected from day to day. Livestock shipments are gaining volume in case of both cattle and sheep. Some seeding of winter wheat will be resumed in the central and south central counties following the recent rains, but dry soils are still retarding seedings in eastern and extreme western districts.

Most of the bean crop has been harvested in Yellowstone County, where threshing is now well under way. Hail damaged beans west of Billings will be mostly used for feed. The crop is good elsewhere in that county and fair to good in most of the other Yellowstone Valley counties. The sugar beet harvest will get under way generally within the next two weeks. Potato harvest has started in scattered localities. Good yields are expected from irrigated fields and a poor crop generally on dryland plantings. Haying is now completed except for a few instances of third cuttings of alfalfa now going into the stack.

Practically all counties now report increasing movements of cattle and sheep to market. Cattle and sheep are coming in from summer range in good shape in Cascade, Madison, and Jefferson counties. All livestock, however, is reported in poor condition from northeastern Montana, where out of county movement from Daniels County increased last week. Elsewhere, cattle and sheep for market have made fair to good gains. Ranges and pastures are poor over much of eastern Montana and dried out further last week in some western districts.

Apple harvest has started in western Montana, where generally a much larger crop is in prospect than was harvested last year. However, in Missoula County a heavy damage to the apple crop is reported from winds.

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TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING SEPTEMBER 21, 1937.

Station	Temperature Highest	Temperature Lowest	Sunshine % of Possible	Precipitation (inches and hundredths) Total This Week.	Total since April 1, 1937.	Total April 1 to Sept. 22, 1936.
Billings	92	49	*	T	7.73	5.66
Bozeman	86	45	*	0.22	10.77	6.46
Cut Bank	79	40	*	0.13	8.46	9.09
Fort Peck	87	42	*	T	4.35	2.88
Glendive	95	39	*	0.00	6.98	6.11
Great Falls	87	44	*	0.24	6.25	5.32
Havre	88	42	90	0.10	8.10	4.15
HELENA	86	49	86	1.48	6.70	6.18
Kalispell	86	50	92	T	6.34	5.38
Lewistown	89	40	*	0.04	7.87	7.67
Malta	90	38	*	T	6.79	4.06
Miles City	98	44	98	0.00	6.79	3.18
Missoula	90	54	92	0.01	3.89	6.02
Poplar	92	38	*	T	5.33	5.81

*No data.

Series - 1937 - No. 24.
Helena, Montana.
September 22, 1937.

W. E. Maughan, Weather Bureau.
Jay G. Diamond, Bureau of Agricultural Economics

The following county summaries of crop conditions for the week ending September 18, 1937, are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BIG HORN: No precipitation; extremely dry. Practically all crops but corn, beans, and beets harvested. Winter wheat seeding delayed because of dry weather. Beet harvest to start about the 30th and the new factory will be open about the 3rd of October. Range dry but cattle in good condition. Shipment of cattle is regular with good prices reported. Plans for feeding lambs and cattle are under way. Beet labor somewhat short.

BLAINE: No precipitation. Threshing of small grains now completed in the Milk River Valley. Fair to excellent yields reported on the irrigated land. Harvesting of dry land crops completed, with wheat yielding approximately 1 bushel per acre on basis of acres seeded. Third cutting of alfalfa on irrigated land now in operation. Livestock in good condition. Seasonal movement to market is now under way. Fair demand for feeder lambs to be placed in the Milk River Valley.

CASCADE: No precipitation during past week. The nights have been cool. No frost. Weather good for maturing latehead grain crops on irrigated land. Ripening of potatoes and sugar beets is prevailing. Potato harvest is fully under way and the digging of sugar beets is scheduled for the next two weeks. Crop prospects on irrigated land are excellent. Cattle and sheep are being moved down from the mountains and are in good condition. Labor situation, normal.

CHOUTEAU: Growing conditions very favorable for winter wheat where moisture is sufficient. 70% of winter wheat seeding completed; many waiting for moisture conditions to improve. In general moisture conditions are better than two previous years. Some movement of livestock to market, especially in Geraldine and Square Butte areas. Shipment to feed will begin within two weeks. Labor situation unchanged.

CUSTER - POWDER RIVER: No precipitation. No frosts. Third cutting of alfalfa under irrigation now going in the stack. Irrigation water still sufficient. Corn was the only dry land crop to make feed in most parts of Custer County. All stock in good shape and gaining. Movement of cattle to market continues, but volume is the lightest in years. North side sheep continue on the move to south country. Winter range looks fair to good, except much of the sagebrush remains dead.

DANIELS: No precipitation. Temperatures generally lower. Frost reported in some areas of county. Crop situation unchanged. Out of county livestock shipments increased materially the past week. Livestock in very poor condition. Many people in need of work that cannot get on W.P.A.

DAWSON: Seasonal weather conditions. Threshing well advanced, with yields returning seed. Corn harvesting in swing to provide ample winter feed in most localities. Surplus over feed supplies in north end of county largely shipped.

FERGUS: Hot and dry. Winter wheat being seeded by folks who have enough moisture, with wheat in some sections beginning to come up. A good many farmers are not going to seed anything except stubble wheat until spring unless some moisture comes. Livestock moving to market except that there will be a considerable reduction again this year in number of livestock kept over the winter. Considerable concentrate and some hay will have to be shipped to supplement present feed supply even for greatly reduced numbers. About 400 farmers will have to have work or some type of help in order for families to get through the winter.

FLATHEAD: No precipitation during the week. No frosts. Weather favorable to the completion of harvest operations, but unfavorable to the seeding of winter wheat and rye. Indications are that only summer fallowed acreages will be seeded to winter wheat where moisture reserves are sufficient to assure germination of the seed. Stubble or fall plowing too dry to germinate seed unless we get more rain. Condition of livestock good, with only limited numbers being marketed. Ranges are drying up, but sufficient growth remaining over from the summer will assure adequate fall pasture.

GALLATIN: No precipitation. No reports of frost except in the very higher portions Grain cutting practically completed, and threshing continues at a rapid rate. Few tag end alfalfa fields being stacked. Early planted winter wheat showing excellent germination in all sections of the county. To date very little hay has been sold. Fall shipments of lambs, some of which are fat and some feeder, are being made. Also shipments are being made on long yearlings and two year olds as grass fat. Feeder calves being contracted for, although few shipments have been mad to date.

GLACIER: Weather still dry and moderately cool. No precipitation. Harvesting not yet completed. A considerable acreage remains yet to be cut. Pastures and range becoming green again since the rain a little while back. Livestock in excellent condition. Large number of sheep now leaving the county. Adequate labor.

HILL: No precipitation during the past week. There is some heavy grain yet to be harvested. In the extreme northwestern corner of the county some grain is still uncut. Weather conditions are favorable toward ripening of late grains, with no frost as yet severe enough to do any damage. Considerable corn has been cut. Range is in fair condition. Livestock in good condition. Not a great deal of movement to market. Surplus of labor.

LAKE: Seasonable weather; no frost, no rain. Third crop of hay harvested and in stack. Potatoes damaged by frost of past week are ripening. Sugar beets making good growth where water is available. Seeding of winter wheat continues. Harvesting and threshing of alfalfa and red clover seed continues with excellent yields being reported. Alfalfa seed being contracted for 20-25¢ per pound and red clover seed 25¢ to 30¢ per pound. Livestock in good condition. Most lambs sold.

(Continued on page 2.)

UNITED STATES DEPARTMENT OF AGRICULTURE
Weather Bureau —— Bureau of Agricultural Economics

REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA
For the Week Ending Tuesday, September 28, 1937.

Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau.
Offices: Fourth Floor, Federal Office Building, Helena, Montana.

Frequent showers and cooler weather generally prevailed during the week, although temperatures did reach the 80's in the extreme eastern portion on the 22nd. Precipitation was light in the northwest, heavy in Phillips, and some south-central counties, and moderately heavy in other sections of the State. The first appreciable snowfall of the season fell on western and in some southern mountains on the 24th. Killing frosts were reported from northern and eastern localities on the 24th and 25th, respectively, while only light to heavy frosts occurred in other portions of the State.

September rains to date have been decidedly deficient west of the Divide, in extreme eastern Montana, and in some northcentral areas, and normal or above in Fergus, Glacier, and Phillips counties and in most southern areas from the Divide eastward to Yellowstone County. With the exception of the area west of the Divide, September precipitation to date in Montana has been greater than for the corresponding September period a year ago.

The beneficial rains of the past week reached the greater portions of the winter wheat growing area and materially improved soil moisture conditions. While the peak of the seeding period is passed, additional seedings were made after the rains and will continue throughout the fall. Early seedings show fairly uniform stands on upland and good stands on irrigated, and are greening in most sections of the north-central, central, and south-central areas.

Killing frosts and low prevailing temperatures during the past week have climaxed the 1937 growing season. Practically all major crops were already mature, with harvesting either completed or in progress with the exception of sugar beets and potatoes. The sugar beet harvest began on a small scale in most growing areas during the last week in September. Yields so far are reported above average. Grain threshing is rapidly coming to a close, but was temporarily halted during the rainy spells during the week. Alfalfa and clover seed crops are mostly in the shock and some threshed. Most green garden crops frosted down during the week. The harvest of a near normal potato crop is under way. Third cuttings of alfalfa in the better areas are rapidly going into the stack. In dry land areas, the haying operations are practically completed. Winter feed shortages threaten in the northeastern and parts of central areas of the State, and all available feed roughages are already in stack.

The seasonal movement of cattle continued at price levels generally satisfactory to producers. The first deliveries of lambs have been made in most areas, and the regular fall movement of sheep and lambs is well advanced. A strong demand for feeding lambs continues. Both cattle and sheep are coming off the high, and summer ranges in good flesh. While much improved over a year ago, lower ranges are below normal and some stockmen in the drouthy areas are seeking other winter feeding quarters.

This is the 25th issue of the 1937 series of "Weather and Crop Conditions Reports" which, during the growing season, were issued jointly by the Bureau of Agricultural Economics and the Weather Bureau. As the growing season is practically over, this will be the final report of this series for this year. Publication of these reports will again be resumed early in April of 1938.

TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING SEPTEMBER 28, 1937.

Station	Temperature Highest	Temperature Lowest	Sunshine % of Possible	Precipitation (inches and hundredths) Total This Week.	Total since April 1, 1937.	Total April 1 to Sept. 29, 1936.
Billings	85	36	*	1.07	8.80	6.40
Bozeman	76	29	*	1.03	11.80	6.98
Cut Bank	63	32	*	0.02	8.48	9.44
Fort Peck	74	32	*	0.84	5.19	2.97
Glendive	87	32	*	0.22	7.20	6.13
Great Falls	64	33	*	0.25	6.50	5.80
Havre	68	30	38	0.40	8.50	4.16
HELENA	62	32	39	0.42	7.12	6.44
Kalispell	62	32	32	0.21	6.55	5.40
Lewistown	72	25	*	0.45	8.32	7.94
Malta	66	29	*	1.34	8.13	4.06
Miles City	84	34	38	0.64	7.43	3.56
Missoula	70	34	40	0.40	4.29	6.16
Poplar	89	30	*	0.74	6.07	5.86

*No data.

Series - 1937 - No. 25.
Helena, Montana.
September 29, 1937.

W. E. Maughan, Weather Bureau.
Jay G. Diamond, Bureau of Agricultural Economics.

The following county summaries of crop conditions for the week ending September 25, 1937 are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: General rain over county during the week, with snow in the high country; temperature somewhat cooler. Majority of peas and grains threshed; harvesting of potatoes started, with yields light. Heavy shipments of lambs and cattle have been made; lambs average a little light; all livestock in good condition, with moisture helping the feed situation; grass matured better and with the moisture there will be less loss of feed.

BIG HORN: A good rain during the week was general over the county and has improved conditions materially. Seeding of winter wheat, which was delayed on account of drouth, is now progressing rapidly and such wheat as was seeded will now germinate evenly. All crops in the valley except corn and beets harvested, both showing promise of good yields. Beet pulling to start at the end of the week. Regular shipments of livestock being made, and preparations being made for extensive feeding in the valley. Labor fairly balanced.

BLAINE: Weather was cool and cloudy, with light showers Wednesday and Thursday, with the first killing forst of the season on Thursday night. Harvesting of sugar beets started in the valley on Monday, with exceptionally good beets but rather low in sugar content. Threshing completed in irrigated sections. Harvesting of potatoes now under way with fair yields reported. Livestock in good condition. Seasonable movement to market now under way.

CARBON: Weather cool and stormy portions of the week; snows in the Red Lodge area. Precipitation general over entire county; .33 inch reported in the Red Lodge area. Sufficient moisture fell to be of great benefit to winter wheat. Bean threshing was in full force but delayed on account of storms. Practically all corn has been harvested and most of the third crop of alfalfa has been stacked. Good third crop yields are reported. Some cattle being sent to market, both by rail and by truck, 2 cars being shipped from the Roberts section. Feed supplies plentiful and stock to feed few in numbers. There has been an inquiry in regard to the purchase of feeder lambs which are reported to be selling at about 9½¢. Most lambs have been sold in this section. Labor situation is fair.

CASCADE: One-half inch precipitation over most of county of great benefit to winter wheat and range grass. First killing frost of season Friday night. No great amount of damage was done as most crops are well matured and harvest is under way. Sugar beet harvest starts Monday. Potato harvesting getting well started. Winter wheat seeding completed. Livestock moving to market in good condition. Labor needed for sugar beet and potato harvest.

CHOUTEAU: Rain over most sections of county varying from one-half to one and one-half inches; heaviest in Highwood area. Winter wheat emerging and making good growth. Farmers gathering thistle feed. Heavy shipments of livestock to market and to feed for winter. W.P.A. projects shifting to water conservation work.

CUSTER - POWDER RIVER: Conditions unsettled. Forepart of the week featured warm weather followed by cold winds and light drizzling rain on Thursday. Temperatures down, with heavy frost Friday night. No damage reported, as unharvested crops are mostly matured beyond point of injury. Practically all harvest completed except sugar beet, which is just beginning. Some wild hay still being cut in range area. Some seeding of winter wheat and rye. No soil moisture on dry land. All stock still in good condition. Cattle marketing continues. First delivery of lambs last week. Several bands of north side sheep located on south country ranges for winter.

DANIELS: Windy and reasonably warm forepart of week. Considerable soil blowing occurred. Cloudy and some local rains during latter part of week. Approximately one-half inch of precipitation in central part of county, of which most of it soaked into ground. Crop situation unchanged. Harvesting of Russian thistles for hay has ended. Continued movement of livestock out of county. Winter feed situation seriously short. One-third of farmers now working on W.P.A., while nearly all farmers need employment.

DAWSON: First frost of season late in week, destroying garden truck. Week opened seasonal and cooled off toward close. Field work practically completed, except scattered haying and hauling of corn and straw. No particular changes in livestock situation.

FALLON - CARTER: Sudden changes in temperature the latter part of this week, with some snow flurries. Very little precipitation. Some acreage of winter wheat being seeded, although seed bed conditions only fair. Considerable acreage of crested wheatgrass being seeded. Livestock conditions fair to good.

FLATHEAD: Light precipitation throughout the county latter part of the week. Weather continues cooler. Harvesting and threshing completed, with the exception of some stacked threshing, which remains to be done in a few outlying communities. Fall plowing has been delayed due to the extremely dry weather. The acreage planted to winter wheat has been extremely small, although another rain within the next ten days may encourage a number of farmers to expand the acreage of winter wheat somewhat. Some third cutting of alfalfa under irrigation remains to be put up. Potato harvest is just starting, with yields running considerably higher than for the last few years. Prices very low. Fall pastures for range stock fair to good and all ranchers assured of plenty feed for winter feeding.

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FERGUS: One-fourth inch rain end of week. First killing frost. Winter wheat conditions best in three years. Plenty of moisture for seeding. Many fields showing green. Large number of lambs and cattle moving to market. Farmers needing work.

GALLATIN: Forepart of week clear and warm; latter part cloudy. Considerable decrease in temperature, with the first real freeze of the season. General precipitation of approximately one inch, much of which was snow. Planting of winter wheat continued until stopped by rain. Due to additional amount of moisture now in top soil, there will probably be an increase in winter wheat planting over what has been seeded previously. Early planted winter wheat stands uniformly good. Increased amount of stock sheep and cattle being shipped.

GLACIER: Temperatures becoming lower; killing frost becoming more wide-spread. No precipitation this past week. Harvesting generally completed. Just a few days left in some spots throughout the county. A few fields of winter wheat looking very good. Livestock in excellent condition. Considerable sales have been made.

JUDITH BASIN: Frost the night of the 23rd. 1.7 inches of precipitation so far in September. Growing conditions improved. Fall wheat up in good shape. Many farmers still sowing. Soil moisture improved, but still below normal. Damage from insects decreasing. Range showing no improvement as yet. Heavy shipments of livestock out of county continues. Most of the stock in good condition. Winter feed situation critical; winter range short. Heavy importations of cottonseed cake expected to maintain breeding herds. Many farmers seeking employment as a result of no income from crops.

HILL: .18 inch precipitation for the past week. Late moisture has tended to improve range conditions and summerfallowed ground is in best condition for several years. Farmers are optimistic over outlook for next season. The first frost of the year was on Thursday night, September 23rd. Some late grains caught by this frost. Majority of these late crops in extreme northwestern portion of the county. Ranges in fair to good condition. Livestock in good condition, with considerable movement to market. A surplus of labor.

LEWIS & CLARK - BROADWATER: More than usual amount of precipitation fell during the week. The rains received will be very beneficial generally. Potato harvest delayed on account of rains. Harvesting and threshing practically completed. Recent rains have encouraged some fall plowing and forage plantings. Winter wheat will be helped greatly with more complete stands and the ability to withstand the winter expected. Livestock moving normally, with continued good prices generally received.

MADISON - JEFFERSON: Nearly 1 inch of moisture in form of rain and snow fell throughout week. Weather cold and damp, with raw breezes. Some heavy frost in places Friday night. Threshing at a standstill, with prospects that some pea crops will be damaged before threshing begins again. In some localities rain and snow was heavy enough so that it may require opening of grain shocks before they will dry. Very little hay was down to be damaged by storm. Winter wheat looking very good with moisture conditions best in years. Weeds making strong start. Heavy shipments of lambs made from all areas during past week, with some activity in moving cattle to market. Condition of cattle and sheep reported best in years. Fall and winter feed prospects good.

MEAGHER: Three-day storm; good precipitation; turning colder; first hard freeze expected. First snow Thursday. Harvest completed. Some fall grain being seeded. Only part of it being up this date. Lamb deliveries and cattle shipping close to seasonal peak. Local buyers scarce. Little or no excess labor yet. Balance will begin to swing toward excess supply.

MISSOULA: Cool and cloudy all week. About one-fourth inch rain first part of week. No general frost although light frosts received in several communities. Sugar beets, apples, and potatoes are only important crops yet to harvest. Harvesting of grains, hay, and general crops practically completed. Very little fall plowing or seeding done yet due to dry soil. Livestock generally in fair to good condition.

MUSSELSHELL - GOLDEN VALLEY: Local showers in different parts of the counties, followed by light frosts. Winter wheat that was seeded early this fall is up and covering the ground. The recent rains should aid the crops already seeded, and should give the later seeding a better start. At present we are in the middle of the seeding period in these two counties. The livestock are in very good condition.

PARK: Intermittent rains Wednesday, Thursday, and Friday delaying threshing, but wonderful help to winter grain and pastures. Another week or ten days will see practically all threshing completed if weather permits. Excellent growing conditions for winter grain seedings. Most livestock in very good condition and seasonal marketing in progress. Labor situation balanced.

PHILLIPS: Within 24 hours .95 inch of rain recorded at Malta, with heavier rains reported to the south and lighter showers to the north. Frost this morning (Sept. 25). Showers today. Sugar beet harvest due to start the 27th in this area. Condition of crop indicates above average tonnage. All other crops harvested. Livestock condition good. Valley farmers looking for stock to use up surplus feed. Considerable stock from the north area will be moved into the valley for wintering.

(Continued on Page 3.)

PONDERA: Weather cool and cloudy. First frost on Friday, the 24th. Combine harvest practically completed. Possibly 1,000 acres of shock threshing yet to be completed; however, this is proceeding with all possible speed. Hay and straw piles in the main irrigable section from Williams to Conrad show an abundance, indicating ample feed reserves. It is expected that approximately 10,000 bu. of oats will be available for sale as feed grain, exclusive of seed supplies. Barley seems to be in abundance; some selling at 1¢ per pound. Some farmers are attempting to take the third cutting of hay, but the stand is short. Range grass beginning to mature and will offer home pasture for winter feed. Tonnage of sugar beets will exceed the expected average for the county. There has been fine growing weather for beets and pulling will begin on or about the 5th of October in the Conrad area and the following week in the Valier territory. Lambs practically all sold. Some movement of cattle to market occurred above normal sales by reason of attractive prices.

PRAIRIE: Killing frost night of September 24, which enabled us to enjoy a long growing season. Very little left in the county to freeze except garden truck. Crops harvested and threshing completed, with disappointing results. Farmers scouring coulee bottoms to get all available wild hay. Livestock in good condition. Few of the farmers cleaning up cattle while prices are good, anticipating buying back on a lower market. Supply of labor is ample.

ROOSEVELT: General light precipitation and stormy Thursday. Temperature lower. Friday, thunder storms, light snow, and rain. Bad soil blowing Tuesday. Continued shipments of cattle out of country as stockmen and farmers are cutting down herds to amount they can winter. Most stockmen will winter only a few head.

SANDERS: Only a trace of precipitation during past week. Soil moisture conditions continue very dry. Very little crop growth account of cool days and frosty nights. Seeding winter wheat being delayed account of lack of sufficient moisture for germination. Grain threshing generally completed, with average yields about 60 per cent of normal. All hay in stack. No third cutting due to water shortage on irrigation projects. Alfalfa and clover seed crops in shock and some threshed with general high yields and quality. Most green garden crops frosted down. Potato harvest starting, with very good yields. Livestock in good condition. Cattle being gathered from high ranges. Marketing of both cattle and lambs well advanced.

SWEETGRASS: Weather cloudy, cooler, and threatening storms. Slight frosts, but no freezing to date. Precipitation .82 inch. Threshing of grain about completed. 90% of all hay harvested. Corn yet to be harvested. Very little fall seeding being done due to dry condition of soil. Most fall seeding will be later. Very little fall plowing done on account of drouth. Livestock is being moved from ranges to fall pasture. Stock in good condition. Culling and marketing of livestock continuing.

TETON: Precipitation for week .18 inch,- not sufficient to do any good. We had the first hard killing frost last night, with a temperature of 28°. 20% of harvesting left in Pendroy area, with between 25 and 30% left in the irrigated areas. Potato digging will start within the next week or so. Livestock moving to market.

TOOLE: Light rains throughout county first part of the week; weather quite cold latter part of week. Killing frosts. Only a few fields of late wheat remain, and conditions have not been favorable for harvesting this week. Some of the crops seeded after June 12 did surprisingly well. 11 to 12 bushel yields being recorded. Several ranchers who took a few cattle to market during the past month have returned and are shipping out in greater numbers. Attractive prices are bringing about further liquidation.

YELLOWSTONE: .83 inch precipitation. First two days warm, followed by general storm and cold weather. Bean threshing stopped due to wet stormy weather. Third cutting of alfalfa about one-half up. Beet harvest starting the 29th. Expect a better than average yield of beets. Livestock in good condition. Feeder stock bringing good prices.

GARFIELD - PETROLEUM: No precipitation. Warm days the first part of the week, changing to cooler and cloudy at the end. No damaging frost as yet. Growing conditions poor because of lack of moisture and cool weather. Moderate movement to market of livestock continues, with some movement of sheep and limited movement of cattle to other areas for winter feeding. Condition is generally good.

LAKE: Light to medium heavy showers over entire county. No frosts reported. Weather generally cool. Winter wheat fair to good germination. Sugar beet harvest starting. Some hay being sold for $8.00 per ton in stack. Some livestock being marketed as grass fat. Livestock in good condition. Adequate labor.

RICHLAND: .17 inch precipitation fell during the past 24 hours. First of week cool Last irrigation of beets completed. Sugar beet campaign to start the 4th of October, with beet harvest to start the first part of next week. Potatoes being dug; bean crops being harvested. Farmers in valley trying to locate lambs and ewes for feed this winter, but experiencing quite a little trouble in finding lambs at a reasonable price. From 8¢ to 9¼¢ have been paid for lambs. Farmers in dryland regions continuing to move their livestock out. Two state veterinarians working in county at this time, testing cattle for T.B. and Bang's disease. Many dryland farmers seeking employment on W.P.A. Transients coming into county, looking for work on irrigated farms.

(Continued on Page 4.)

ROSEBUD: Temperature above normal first half of week. Rain with cooler weather and light frost last of week. Stacking of third crop alfalfa completed. Preparations under way to start beet harvest next week. All irrigated corn either mature or in the shock ahead of frost. Only limited demand for hay beet tops, and other feed which is available in irrigated districts. Cattle shipments probably reached the peak during the week. Most stockmen either selling out or cutting their herds in order to put their finances in better shape. Delivery of lambs in all parts of county to start next week. Labor adequate to handle beet harvest.

VALLEY: Weather conditions have been very unsettled the past week from moderately warm to very cool, with high winds and some local showers the past two days. Very cloudy weather. Beet harvest started Monday. One field of beets yielded as high as 17 tons per acre so far. Harvesting of alfalfa seed completed, with very light yields. Third cutting of hay on some fields just completed, but very light. Livestock still moving.

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Helena, Montana,
September 28, 1937.

increase in demand for labor has occurred due to spring farming operations being started.

STILLWATER: Weather conditions favorable for crop growth. No precipitation. Spring work in full swing. Winter wheat coming thru in good shape. Planting of beets started. All livestock in good condition. Samll flocks of sheep have completed lambing.

SWEETGRASS: Precipitation .04, weather cool. Growing conditions slow, frosts at night and grass starting. Winter wheat condition good. Cropping for spring grains delayed due to moisture. Higher lands, spring wheat being seeded. Lambing still progressing in good shape with good percentage. Calving likewise. All livestock as a whole in excellent shape. Labor normal. Crickets increasing slowly.

TETON: No precipitation. Ideal growing conditions. Seeding operations started. Almost 50% thru seeding wheat in eastern part of county. Northern half will not be seeding for some time. Winter wheat condition appears good. Grass proposition serious in western part of county which area did not get as favorable rains this spring as other parts. Lambing getting started. Calving about 50% completed.

TOOLE: .25 inch rain at Shelby during week general throughout county. Temperatures higher. Some seeding of spring wheat done and more operators have begun during the past few days. It is expected that everyone will be in the fields by Monday of next week. Moisture tests show from 2½ to 4 feet or better of moisture, and there is plenty of moisture to start all crops throughout the county. Lambing expected in full swing the next week or ten days. Lack of market for wool is a problem of extreme importance to sheepmen at present. Many have not sold their wool from last year.

VALLEY: No precipitation past week, cloudy with some wind, particularly Sunday. There is still some snow in deep coulees. Just enough wind to dry off fields so that field work is beginning. Grass beginning to green up. Considerable soil blowing in Avondale area, particularly where there is no covering of any kind. Some livestock being turned out, but feeding still quite general.

WHEATLAND: General rain throughout the county aided moisture conditions considerably. Little field work as yet, due to recent moisture, however, operators have started in the dryer areas. Lambing started during past week. Grass making start.

WIBAUX: No precipitation, weather warm. Good growing conditions. Seeding of wheat general. Moisture conditions good so far. Grass starting in some places. Winter wheat reported in only fair condition. Fall seeded crested wheatgrass reported coming up. Dams built last fall in good condition, and a large number of acres have been flood irrigated this spring. Acreage seeded will be right up to soil depleting base according to present outlook. Livestock in good condition.

YELLOWSTONE: No precipitation. Weather generally warmer during past week. Spring wheat seeding both on irrigated and dry land started. Field work in full swing after moisture of previous week. Beet growers preparing to seed beets in near future. Livestock in good condition. Range conditions good as to moisture content with prospects of good grass this summer.

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Helena, Montana,
April 19, 1938.

MISSOULA: Warm and cloudy most of week. Few scattered showers. Excellent growing conditions. Grass starting. Very little winter wheat. Larger than usual acreage of spring wheat. All phases of spring work in full progress. Crop prospects good at present. Pastures improving rapidly. Some livestock in higher areas still on feed. Livestock generally in fair to good condition. Men in demand for spring work.

MUSSELSHELL - GOLDEN VALLEY: Moderate spring weather with a small amount of precipitation in local showers. Ideal growing weather has helped winter wheat and grass. Winter wheat good. About 40% of spring seeding completed. Prospects for good lamb and calf crops. All cattle and livestock are in very good condition.

PARK: One rain during week increased soil moisture conditions to best in years. Weather for most part has been quite cold though grass is starting nicely. Winter wheat in fine shape and farmers in Yellowstone and Shields valleys are in the field. Higher bench lands still too wet. Livestock in good shape with quite a bit of feed left over. Quite a number of men seeking work.

PHILLIPS: No precipitation. Warmer and fields getting in good condition for spring work. Moisture and growing conditions good. No wind. Farmers just starting spring work in dryland areas. Field preparation under way on irrigated farms. Ground working up good. No grasshopper outbreaks noted to date, although a few hatched before the last storm. Stock condition generally good. Most of stock turned out on range.

PONDERA: Conditions favorable for plant growth during most of week. Weeds have started in summer fallow fields. Light local showers Thursday afternoon. Some seeding operations begun. However, soil for the most part is still too wet. Winter wheat coming along in good shape. Some seeding of beets has started. Lambing in progress with good lamb crops reported. Labor supply adequate. No insectes hatched to date.

PRAIRIE: Weather warm. No precipitation. Ample moisture at present time. Growing conditions good. Earliest seeded wheat is just coming through the ground. Seeding in full swing. Snow of a week ago is baking and crusting the soil to quite an extent. Grass seems to be getting a good start. Livestock in fair condition. Stock water and prospective range grass supplies adequate for stock now held. Labor supply ample.

RICHLAND: Fair weather continued throughout week with light wind from the south that melted snow and made travel over the greater part of the county possible. Some roads still blocked. Field work started this week both in dryland and irrigated communities. A number of dryland growers are starting seeding, particularly on summer fallow or corn ground. Others are cleaning off the thistles and getting land in shape for seeding. Lack of finances may prevent some growers from seeding as large acreages as desired. Moisture conditions best in 10 years, with moisture ranging from two to as high as four feet, with an average of from two to three feet over the county. Not sufficient under-grass has appeared yet to warrant turning cattle on the range, and growers are continuing to feed livestock. Some labor being employed now in field work. No difficulty has been experienced so far in getting help for field work. Grasshoppers have hatched out in a small way on some of the south slopes but not to any appreciable extent and not sufficient to warrant poisoning.

ROOSEVELT: Weather cloudy and cool first of week with light showers, warm and clear last of week. Snow all gone. Farm work started with some seeding being done on lighter soils. Growing conditions good. Grass starting.

ROSEBUD: No precipitation. Good growing weather. Winter wheat and rye making good growth. Seeding of spring wheat about 50% completed. Large acreage of beet land ready for seeding. Contracts expected to be released first of week. Livestock conditions good. New grass coming along in good shape. Sheep generally being trailed toward lambing ranges. Most bands to start lambing about April 25th.

SANDERS: Average maximum temperature 63; average minimum 32. Growing conditions excellent. Slight precipitation. Soil surface drying rapidly but very good subsoil moisture. Farmers in field over entire county. Spring seeding well under way. Soil in ideal condition for planting. Winter wheat in very good condition and making rapid growth. Meadows greening rapidly. Livestock in good condition. Most livestock out on range which has advanced to good carrying capacity. Lambing 75% completed under ideal weather conditions, high percent lamb crop reported.

SHERIDAN: Weather continues fair with no precipitation. Crop conditions excellent. Fields in good shape for seeding. Plenty of moisture present in the soil in all parts of county. Spring field operations well under way. No change in livestock conditions. Feed is scarce, range is of little value. Slight

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The following county summaries of crop conditions for the week ending April 16, 1938 are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: Considerable precipitation in form of wet snow and rain during past week; temperature warm; considerable snow in higher valleys. Too wet for field work; grass starting in lower valleys. No change in livestock conditions.

BIG HORN: No precipitation. Growing conditions improving with warmer weather, though nights have been somewhat cold. Winter wheat making good progress under fair growing conditions with practically 100% survival. Weeds reported rather menacing. Some spring wheat being seeded though the acreage will not be over normal. Farm work will be general by the first of the week. Soil in splendid condition after favorable precipitation during past few weeks. Large acreage of sugar beets anticipated but contracts have not as yet been offered by the Sugar Company. Big increase in use of barnyard manure noticeable this spring. Livestock in good condition. Calving conditions favorable and livestock being turned out on the range. Labor ample. Cricket control campaign begun.

BLAINE: Clear sunshiny days with moderate temperatures and no precipitation prevailed during week. Field work started on both dryland and irrigated ranches. Moisture conditions make preparation of seed bed very satisfactory. Subsoil moisture on dry land ranges from 20 to 40 inches depending on quality of summer fallow. Stubble fields have an average of 18 inches of moisture. Lambing started. Sheep men report high percentage of twins. Cattle received a considerable setback on account of storm the fore part of the month. Otherwise livestock conditions r very favorable.

CARBON: Light showers reported in northern part of county on Wednesday. Some windy weather reported, still plenty of moisture in south and west portions of county. Seeding of grains in full operation in Clarks Fork Valley and Joliet and Boyd vicinities. Planting of sugar beets started. Winter wheat looking especially well. Moisture conditions thru moisture tests have shown plentiful supply at a depth of 3 to 4 feet with the exception of very heavy soils underlaid with shale. Livestock condition fair. Grass has hardly made a start but livestock have come thru the winter in good shape with little feed. Labor plentiful.

CASCADE: No precipitation past week. Warm, calm days made ideal growing conditions for winter wheat and range grass. Seeding of spring wheat started, also some sugar beets have been seeded. Preparations for seeding of all crops well under way. Some farmers tilling for control of pale western cutworms. Winter wheat still appears in excellent condition and is improving with good prospects for a crop, providing insect and hail damage does not occur. Livestock in good condition. Surplus of labor.

CHOUTEAU: Growing conditions good, light rains. Seeding under way in most sections, will be in full swing next week. No change in livestock conditions. Demand for farm hands is average. Mormon crickets hatching, dusting crews to begin next week.

CUSTER - POWDER RIVER: Generally warmer than previous week and more favorable for farming operations. No moisture received. Supply of soil moisture on dryland sufficient for seeding and early crop growth, but rain will be needed later. Seeding and other tilling operations now under way. Acreage of grain crops apt to be somewhat larger than a year ago. Irrigated lands being prepared for beets and other crops. Winter wheat and rye making good startwith warmer weather. Stock now able to get a good fill of green grass. Plenty of old grass left on range in south country. Some sheep on way back to north side. Lambing just beginning with ewes in good condition and prospects of good grass for lambing season. Crickets hatched over large area in south country. Plans for individual control measures under way.

DANIELS: No precipitation. Growing conditions good except for strong winds during fore part of week which caused considerable soil erosion. Nearly all farmers went into fields this week. Considerable seeding of small grains in progress. Soil moisture conditions very good in all parts of county. Grass and range pastures beginning to grow. Old crested wheatgrass fields showing up green. Lambing in progress on small farm flocks. Stockmen in general optimistic about summer feed conditions.

DAWSON: Weather seasonal, no precipitation. Farming generally started over county, with moisture conditions encouraging. Flood irrigation projects operating during week. Grass greening slightly.

FALLON - CARTER: General growing conditions excellent. Moderate temperature prevails. Subsoil moisture sufficient to start grass and crops in good shape. Estimate 100% survival of winter wheat. Spring seeding fully under way. Optimism prevails. Grasshopper situation still questionable. No livestock losses reported as result of sudden snow storm the past week. Livestock in good shape. Calving operations beginning. Lambing operations have not started. Anticipate excellent grass growth by middle of lambing season.

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FERGUS: Precipitation in April to date, .37. Warm slow rain and warm days throughout most of week have made favorable growing conditions. Wheat showing good growth in all parts of county. Crop conditions very satisfactory and condition of winter wheat is probably better than it has been at any time since 1932. Alfalfa fields and range beginning to show green. Spring work beginning in most sections of county but at least two weeks later than work was started last year. Some farmers in eastern part of county are through seeding while others in that section are well under way. Livestock conditions good with stock recovering rapidly from recent storm. Calf crop normal or above. Lambing beginning in some of range bands but majority will not start probably until May 1st. Arrangements completed to start control work on crickets as soon as they are reported.

FLATHEAD: Warm dry weather prevailed during week. Field work started throughout county and seeding well under way. Loss of winter wheat now appears to be negligible and condition of winter wheat crop is good. Soil moisture conditions good, compared with last few years. Condition of livestock good.

GALLATIN: Snow and rain fore part of week. Rising temperatures and drying winds latter part. Winter wheat generally showing good stands, with no winter kill as yet reported. Plowing now under way. Still a little wet in southern portion of county for field work. Range lambing continues.

GARFIELD - PETROLEUM: Trace of precipitation. Several cool, cloudy days. Growing conditions good, and continued favorable during week with moisture sufficient for good starts of grass, fall seeded wheat, and early seeded crops. Spring seeding in full swing or practically completed over large portion of the area. Moisture conditions sufficient but additional would be favorable. Ranges showing some growth and are beginning to furnish feed for the limited numbers of stock. Feeding almost entirely discontinued. Calving begun.

GLACIER: Warm all week. No precipitation. Few freezing nights in Cut Bank vicinity. Grass coming rapidly. Winter wheat in excellent shape. Spring wheat seedings going on rapidly in Cut Bank vicinity. Soil and weather conditions unsuited for seeding in north and western parts. Lambing started, good strong lambs being reported with a very good percent crop. Many farmers requesting information on 1939 AAA acreages in order to adjust 1938 seedings.

HILL: Trace of precipitation for past week. Field work under way throughout entire county. Some wheat seeded in more favored localities. Soil moisture conditions good. Grass starting in good shape due to warmer weather. Livestock in fair to good condition. Majority of livestock now feeding on ranges. Surplus of labor.

JUDITH BASIN: Precipitation .56 so far in April, .43 for past week. Generally cloudy, temperatures moderate, growing conditions improving. Soil moisture varies from 12 to 18 inches over most of central and eastern portions of county. In west portion considerably more. Winter wheat coming nicely the past week. Grass emerging in good shape. Some soil blowing in eastern portion of county the past week. Crickets hatching rapidly, infestation appears serious in western part of county. Additional moisture needed to maintain growing conditions. Feed situation improving as some stock are able to start grazing. Some lambing started and calving well under way. Practically no stock being offered for sale. Surplus of non-relief labor.

LAKE: Warm days with little frost at nights. No precipitation. Partly cloudy. Seeding of small grains in full swing. Growing conditions good. Alfalfa and grass making good growth. Livestock in good condition. Cattle and sheep being put on spring ranges. Lamb crop much above normal. Crickets hatching in alarming numbers in western portion of county.

LEWIS & CLARK - BROADWATER: Scattered showers. Ground warming up slowly. Farming though operations quite generally in full swing. Some planting being done. Even/the subsoil moisture conditions are better than for several years there is still a large need for additional moisture. Winter wheat and alfalfa came thru the winter in good condition. Lambing and calving progressing satisfactorily. Cattle will soon be put out on summer pasture. Only occasional grasshoppers or Mormon crickets hatching.

MADISON - JEFFERSON: Growing conditions excellent with a warm two-day rain over practically all of the counties that greatly improved soil moisture. Winter wheat reported to be in good condition in all winter wheat areas, and considerably better than a year ago at this time. Seeding of spring grain has started in several localities, with full farming operations expected to get under way within next week. No winter killing of alfalfa reported to date. Livestock continued to do well. Several good calf crops reported. Warm rain caused little if any loss of lambs, but continued wet weather in the vicinity of Sheridan caused light losses.

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